

Table 5. Some studies documenting the effects of released hatchery salmon on wild salmon
(studies limited to those conducted in natural streams and directly demonstrating competition)

*Confounded genetic/environmental effects. This review was meant to determine whether released smolts that were offspring of wild parents have effects on the behavior of wild fish in streams. If the parents of the released hatchery fish were either of non-local origin or from a multi-generation hatchery stock where genetic effects are likely (see Table 4), then the genetic and environmental effects are considered to be confounded

Species	Effect	Local hatchery stock?	Genetic or environ. effects*	Replication	Control	Reference
Coho salmon	•Foraging •Habitat use •Displacement	No	confounded	Controls only	Yes	Nielsen (1994)
Steelhead	•Displacement •Aggression rates	No	confounded	Yes	Yes	McMichael et al. (1999)
Steelhead	•Growth	No	confounded	Yes	No (density)	McMichael et al. (1997)
Steelhead	•Displacement	Yes	Environ-mental	Yes	No	Berejikian (1995)
Brown trout	•Territorial/social behavior	No	confounded	No	No	Bachman (1984)